

ABSTRACT OF THE DISCLOSURE

A method for manufacturing a semiconductor device of the present invention includes the steps of: (a) depositing an interlayer insulator film on a substrate including a plurality of conductive layers; (b) forming a plurality of contact holes running through the interlayer insulator film to reach respective ones of the plurality of conductive layers, each of the contact holes having a tapered portion at an upper end thereof; (c) depositing a conductive material film on the interlayer insulator film so as to fill the plurality of contact holes; (d) removing the conductive material film until a surface of the interlayer insulator film is exposed so as to form a plurality of plugs made of the conductive material film filling the plurality of contact holes; and (e) removing a portion of the interlayer insulator film, which has been exposed in the step (d), so as to remove the tapered portions.